

# **EcosNature Project Annual Implementation Plan Fiscal Year 2000**

World Wildlife Fund

Cooperative Agreement LAG-A-00-99-00048-00

## **WWF EcosNature Project Implementation plan**

**Overall Goal:** To conserve the full expression of biodiversity in EcosNature ecoregions.

The following outlines the implementation plan for the ECOSNature Project for fiscal year 00. The first part outlines implementation for overall LWA project coordination followed by detailed plans for ecoregion specific conservation in Atlantic Forests, Southwest Amazon, Bering Sea, Lower Mekong Forests, and Sulu Suluwesi Seas. Long-term objectives are expressed in the following workplans for the LWA coordination team and within ecoregions themselves.

### **LWA Coordination Team Implementation Plan**

**Long-term Objective: Mobilize conservation action on an ecoregional scale**

**Total level of effort: \$582,000 (\$291,000 USAID; \$291,000 WWF Match)**

**Activity 1:** Establish coordination team

Level of Effort: \$88,000 (USAID)

**Anticipated Result:** WWF LWA coordination team established to provide the necessary programmatic, financial administrative oversight to advance conservation impact in ecoregions.

The LWA coordination team will provide the necessary programmatic, financial and administrative oversight to support ecoregional implementation. Under the guidance of the ERBC Unit Coordinator, Sheila O'Connor, key staff will be hired as follows:

- Project Coordinator hired in first quarter to provide financial and administrative support for implementation of the LWA
- Program Officer hired in first quarter to advise on overall technical administration of the LWA
- Administrative Assistant hired in first quarter (50%time) to provide administrative support

**Activity 2:** Facilitate key activities and communication as opportunities for exchange and learning to advance ERBC implementation.

Level of Effort: \$42,000 (USAID)

**Anticipated Result:** Fora and communication mechanisms established to support exchange and guidance across ecoregions.

- Facilitate ERBC workshop for WWF  
In order to provide a forum for sharing experiences on the process and implementation of ecoregion-based conservation, ecoregional staff from across the WWF network will meet for a workshop in Malaysia, November 1999.
- Co-coordinate ERBC workshop with other NGOs  
With other partners within the LWA as well as other initiatives that are seeking to implement broad-scale conservation through different approaches, WWF will collaboratively hold a forum to discuss the concept and implementation of ERBC.

- Produce a multi-media communication product to convey what we know thus far and the efforts to achieve successful ERBC.
- Facilitate development of guidelines and tools on the phases/themes of ERBC. For instance, a workbook on conducting biological assessments and developing biodiversity visions.

**Activity 3:** Facilitate Innovative Grants

Level of Effort: \$85,000 (USAID)

**Anticipated Result:** Timely opportunities for innovative ERBC implementation actions supported in Global 200 ecoregions.

The purpose of innovation learning grants is to promote creative and rigorous thinking and action in advancing the concept and practice of ERBC in the EcosNature Project. With criteria already established, several cross-ecoregional thematic issues are already being considered for fiscal year 00 and focus on specific themes emerging or testing methods in the conceptual model of ERBC. For instance, these grants will support exploring the possible mechanisms to address economic issues at the ecoregional scale by testing a training in the Atlantic Forests. In addition, more details are provided below on plans to test out a model of reconnaissance in the East Africa Marine and how to address global threats such as toxics and climate change in the Bering Sea. The level of focus will be at specific ecoregions that are linked to broader learning to feed ideas and learning to other ecoregions. With global learning across ecoregions as one of the key principles of advancing our knowledge and practice of ERBC, innovation grants provide an avenue to test ideas and share lessons.

- **Testing the ERBC model**

As part of the conceptual model of the ERBC process, reconnaissance is an important step in scoping out the potential for if and how ERBC can add value to conserving the full expression of biodiversity in an ecoregion. Thus support will be given to test different types of reconnaissances to advance our learning on what types of scoping exercises add the most value in different contexts. For example, in the East Africa Marine Ecoregion, where several regional initiatives are already underway, a multi-disciplinary team was engaged to examine the basic data on the biodiversity of the ecoregion, the socioeconomic and macro-institutional factors that drive change in the ecoregion, and who is doing what where to identify opportunities for adding value. This team has completed a series of site visits throughout the ecoregion examining existing data sets, meeting and interviewing key stakeholders, identifying data gaps, and proposing avenues of further analysis and research for the assessment phases of the program. Their results are in the process of review and feedback that will spearhead the development of a plan of action for continuing the ERBC process. Another key component of the conceptual model is building constituency for sustained commitment to conservation over large geographic scales over the long-term. The Yaounde Summit was just such an example of building high level policy commitment. To continue the process of building constituencies at multiple scales, support will follow-up on a mandate by the Yaounde Summit to develop a coherent regional conservation plan for the Tri-national initiative that links Dja, Nki and Boumba Bek Reserves in Cameroon; Odzala National Park in Congo and Minkebe reserve in Gabon.

- **Addressing threats from global scales to ecoregional targets**

A strength of ERBC is the potential to address global threats that affect ecoregions across the world. For example, toxics and climate change are critical threats to ecoregions such as the Bering Sea. Support for addressing these threats will include two facets to support creative strategies. The first is a bottom-up focus on monitoring contaminants in subsistence foods in pilot coastal communities of the Bering Sea. This is a potentially exciting model that both generates important information on the chain of impacts from toxics while at the same time supports local-ecoregional linkages by engaging indigenous groups for greater involvement in the dialogue and decision-making across the ecoregion. The second is a global assessment of the impacts of climate change on marine ecoregions such as the Bering Sea. Now in the design phase, this work will focus on the vulnerability and adaptation strategies of these marine systems. The global nature of climate change as a threat makes it particularly challenging to address and this effort is driven by the need to pool understanding to identify patterns and build collective learning across ecoregions to identify appropriate actions at the scale of Bering Sea and beyond.

**Activity 4:** Establish a conservation foundation in Bolivia.

Level of effort: \$76,000 (USAID)

**Anticipated Result:** Strategic technical advice provided in the establishment and development of the Enterprise for the Americas Initiative Foundation (EAI) in Bolivia to support ERBC in 6 Global 200 ecoregions.

In response to historical challenges, the Enterprise for the Americas Initiative Foundation (EAI) will be established as a private foundation in Bolivia. WWF will assist in this process in developing the foundation as a reliable and transparent funding mechanism for conservation over the long term. This improved capacity will enhance and support the conservation of biodiversity in Bolivia's 6 terrestrial Global 200 ecoregions (Southwest Amazon, Pantanal, Andean Yungas, Chiquitano dry forest, Cerrado woodlands, and Central Andean Dry Puna) and 3 freshwater Global 200 ecoregions (Upper Amazon Rivers and Streams, Brazilian Shield Amazonian Rivers and Streams, and High Andean Lakes). Two of these Global 200 (Southwest Amazon and Pantanal) are priority ecoregions for full scale ERBC efforts within the WWF LAC Programme. This activity will establish and strengthen a financial mechanism that could provide support for these activities. Key actions for this fiscal year are to:

- Recruit a Technical Advisor who will provide technical assistance to the General Manager, Board and EAI Fund staff in the establishment and implementation of the EAI Foundation.
- Hire short-term consultants to advise on the guidelines and procedures for the administration of the Fund, methodologies for improving the Fund's strategic focus and conduct outreach to potential beneficiaries.

**Atlantic Forest Ecoregion Complex  
Implementation Plan - Year 1  
October 1, 1999 - September 30, 2000**

***Context:***

**GOAL:** To conserve the full extent of the globally significant biodiversity of the Atlantic Forest Terrestrial Ecoregion Complex and the Upper Paraná River Freshwater Ecoregion of Brazil, Argentina, and Paraguay

***1. Biological Importance***

The Atlantic Forest is one of the most endangered rain forests in the world. Once covering approximately 1 million km<sup>2</sup> in Brazil, Paraguay and Argentina, only seven percent of it now remains, and that is scattered in fragments. The Atlantic Forest is also one of the most diverse rain forests in the world. One hectare in the Brazilian state of Bahia was found to contain 450 different species of trees. More than 52 percent of the tree species and 92 percent of the amphibians in the Atlantic Forest are found nowhere else in the world. And because the vast majority of the Atlantic Forest has disappeared, many of these species – including 22 primate species and at least 158 species of birds – are highly endangered. The tri-national forest corridor, centers on the Argentine province of Misiones and eastern Paraguay, and includes Iguazu National Park and smaller forest fragments in Brazil. This is the largest remaining area of the Paraná/Paraíba Interior Atlantic Forest ecoregion and is the last refuge of the jaguar in the Atlantic Forest Ecoregion.

Today, only about 7% (58,000km<sup>2</sup>) remains of the Interior Atlantic Forest subecoregion,. Deforestation of this region has been most severe in Brazil where as little as 2% of that forest type remains, virtually none existing outside protected areas. About 12,000km<sup>2</sup> remain in Argentina, forming a contiguous corridor covering a large part of the province of Misiones. Although Paraguay retains a larger area (24,000km<sup>2</sup>) of Interior Atlantic Forest than either Brazil or Argentina, deforestation in Paraguay in recent years (the highest rate of any country in Latin America) has fragmented the remaining forest. Conservation of the Atlantic Forest in this tri-national region is also important for the conservation of the biodiversity of the Upper Paraná River ecoregion. With a remarkably diverse fauna, including over 300 species of fish and other aquatic organisms, both vertebrates and invertebrates, this ecoregion has a high degree of species endemism.

***2. Socio-economic context and threats to the ecoregion***

In Brazil, the Atlantic Forest was the first area to be colonized and has developed into the agricultural, industrial and population center of the country. The original Atlantic Forest cover has been reduced by centuries of unsustainable use into small forest islands surrounded by agricultural and urban development. In addition to containing “genetic banks” of some of the world’s rarest species, what remains of the Atlantic Forest is directly associated with the quality of life of 70% of the Brazilian human population who live in the ecoregion within 100 km of the coast. The remaining Atlantic Forest fragments are vital to watershed protection, prevention of soil erosion and siltation, and in maintaining microclimates and other environmental conditions necessary for the very existence of Brazil’s most populated cities and rural zones. In contrast,

the isolation of the Atlantic Forest from human population centers in Argentina and until recently in Paraguay, has allowed the preservation of one of the largest forest corridors. Only about 3% of the entire Atlantic Forest is now in protected areas. Many of these areas are not effectively protected, and their land tenure is unresolved. Existing protected areas are threatened in all three countries by the establishment of land reform settlements, within their boundaries or in adjacent areas, using ecologically and economically unsustainable land-use practices. Brush and forest fires, road construction, cutting of timber and firewood, agricultural expansion, uncontrolled tourism and urban sprawl are all important threats to the Atlantic Forest. In addition to deforestation, dams threaten the biodiversity of the Upper Paraná River ecoregion.

The concentration of Brazil's economic development in the Atlantic Forest has resulted in destruction of the forest, but it has also supported the development of a technical capacity to address conservation problems. Communications and transportation infrastructure provide relatively easy access to all areas of the Atlantic Forest region in Brazil. The academic and research institutions of the region include some of the most advanced and sophisticated in Latin America. The democratization process initiated in Brazil within the last decade has opened the door for Brazilian society's participation in recognizing and solving social problems. Some 500 Brazilian NGOs are now registered as being active in conservation of the Atlantic Forest. Many of these organizations have formed networks which have been instrumental in developing policies and legislation which, if effectively implemented and enforced, could protect the remaining Atlantic Forest in the country. The processes for effective participation and society's recognition of responsibilities of citizenship are still in their infancy but growing rapidly in Brazil.

Similar opportunities are opening in Argentina and Paraguay. WWF has catalyzed the organization of a tri-national consortium of governmental and non-governmental organizations to stimulate and coordinate conservation efforts for the Tri-National Forest Corridor. The consortium is actively involved in promoting the passage of pending Misiones Provincial legislation to establish the Argentine portion of the "Green Corridor" as a multiple-use protected area connecting the existing parks and reserves. (This legislation was passed in December 1999.)

### ***3. WWF's existing activities***

Since 1972, WWF has supported field projects in Brazil to protect the Atlantic Forest. The establishment in 1996 of WWF-Brazil as a national organization made it possible to more effectively pursue national policy initiatives linked with global biodiversity conservation policy initiatives. WWF-Brazil currently supports two integrated conservation and development field projects, each protecting a key site in the coastal Atlantic Forest. With the inception of the ecoregion-based conservation (ERBC) initiative in 1998, WWF-Brazil hired a program officer to spend full-time coordinating ERBC in the Brazilian portion of the Atlantic Forest. A multidisciplinary team of staff, with members specialized in communications, policy, environmental education, organizational development, and geographic information systems has contributed to the development of an ambitious agenda of initiatives in Brazil to promote exchange of experience among institutions involved in Atlantic Forest conservation, development of national policies to support Atlantic Forest conservation, as well as efforts to establish new protected areas and to increase public support for existing protected areas.

Together with field partners in the state of Bahia, WWF-Brazil is supporting the development of sustainable models for land reform settlements that are compatible with Atlantic Forest conservation. WWF-Brazil is also promoting the adoption by additional Atlantic Forest states of value-added tax incentives for the establishment of protected areas. In addition, WWF-Brazil is leading an effort to add the Paraguay and Argentine portions to a map, already produced by the Brazilian NGO SOS Mata Atlântica, showing changes in Brazilian Atlantic Forest cover in Brazil in 1985, 1990, and 1995. Once completed, this ecoregion map will be useful for conservation action planning and developing support for policy work in all three countries. WWF-Brazil, in partnership with the State University of New York, has developed, with USAID support, an innovative training program for Brazilian conservation professionals. This program has supported the development of long- and short-term, formal and non-formal training for Brazilians in subjects of critical importance for conservation biology and sustainable development. The program has trained many Atlantic Forest conservation leaders in such areas as organizational management, economic incentives for private conservation, conservation policy, environmental economics, environmental education, protected area management, and community forest management.

WWF's activities in the Argentine portion of the Atlantic Forest are coordinated by the Fundación Vida Silvestre Argentina (FVSA), a national NGO with official membership in the WWF international network. FVSA has been instrumental in mobilizing institutions in Argentina, Paraguay, and Brazil to recognize the importance of a remaining corridor ("Green Corridor") of Interior Atlantic Forest covering most of the province of Misiones, Argentina, and extending across national borders into small forest fragments in Brazil and into larger forest fragments in eastern Paraguay. With WWF support, FVSA conducted an in-depth analysis of the conservation status of the tri-national forest area in 1994 and supported national priority-setting meetings in Argentina and in Paraguay in 1995. Tri-national meetings in 1995, 1997, and in 1999, helped to consolidate priorities and develop working relationships among organizations in all three countries to advance conservation of the Green Corridor. An informal network of organizations has formed to advance implementation of an agreed-upon action plan. This network now needs to develop a formal structure to sustain and expand coordination of multi-sector national and trans-boundary action. WWF, FVSA, and the Provincial Ministry of Ecology in Misiones developed a formal agreement in 1998 to hire a secretary, based in Eldorado to coordinate communications among participants of the Tri-National Initiative. A major focus of this tri-national initiative has been to promote legislation proposed in Misiones Province to establish the Green Corridor as a multiple-use protected area. FVSA led a national-level campaign to support this legislation. This legislation passed in December 1999. FVSA's efforts now will focus on implementation of the law in Argentina and integrating efforts with national efforts in Brazil and Paraguay. In addition, FVSA has established a private reserve located inside the Green Corridor and is working with the provincial park service to strengthen the protection of existing public protected areas. FVSA has also supported the development of pilot projects relating to alternative economic activities compatible with forest conservation in the region. To permit a greater investment in Atlantic Forest ecoregion-based conservation activities, FVSA has recently hired a coordinator for ERBC in Argentina. To facilitate coordination with Brazil and Paraguay, he is based in a newly-established FVSA office in Puerto Iguazú, the heart of the tri-national area.

In 1998, WWF-US began to mobilize action for ecoregion-based conservation (ERBC) for the Atlantic Forest. A senior program officer and desk officer, located in the Latin America Coordinating Center in Washington, coordinates international action and fundraising among the WWF network for the ecoregion. This effort resulted in the development of a preliminary action plan to develop ERBC for the Atlantic Forest Ecoregion. The Summit Foundation has made a five-year funding commitment (beginning in 1998) to support Atlantic Forest ERBC. Funding from the MacArthur Foundation for the tri-national forest corridor network made it possible for WWF to support a third meeting of the tri-national network in August 1999.

To date, WWF has not had official representation in Paraguay, but is working with three organizations – Fundación Moises Bertoni, the Subsecretariat of State of Natural Resources and Environment and the Forest Engineering Faculty (CIF/UNA) of the National University – in developing Paraguayan participation in protection of the tri-national forest corridor. WWF and FVSA worked with these organizations in 1995 to identify priorities for the Paraguayan Atlantic Forest. The organizations realized, however, that the 1995 plan was not specific enough to mobilize concrete action. The three Paraguayan institutions worked with WWF to plan a national workshop in July 1999 involving some 40 stakeholder organizations to revise the 1995 Paraguayan national plan. In this new effort, the groups promoted dialog and buy-in among Paraguayan stakeholders as well as developed more practical lines of action which can be readily implemented in Paraguay and integrated with the tri-national initiative to conserve the Green Corridor. The group presented the Paraguayan strategy at the tri-national meeting in August 1999, and they formed a national commission with multi-sector representation to coordinate Atlantic Forest work in Paraguay and integrate the work with that in Argentina and Brazil. Over the next years, WWF will seek to strengthen the organizational structure and of this commission and build the capacity of its members so as to develop a mechanism to sustain coordinated conservation efforts for the Atlantic Forest in Paraguay over the long term.

Parallel to this constituency building of stakeholder organizations in all three countries, WWF has begun plans to undertake a biological assessment to establish a biological vision for the Paraná/Paraíba Interior Atlantic Forest ecoregion. This involves significant participation of scientists from all three countries. This is in parallel with a process WWF is coordinating to establish a biological vision at the Atlantic Forest ecoregion complex (12 ecoregions) level. WWF succeeded in integrating aspects of ecoregion-based planning in the methodology for a national priority-setting workshop (PROBIO) for the conservation of the Brazilian Atlantic Forest convened by the Ministry of the Environment in August 1999. The participants in this workshop used ecoregions as the unit of analysis to set priorities. Recognizing that the Atlantic Forest crosses international borders, the PROBIO workshop organizers invited Argentine and Paraguayan government and NGO representatives to participate. These representatives are involved in organizing the tri-national biological assessment to complete the biological vision for the Interior Atlantic Forest ecoregion.

#### ***4. Other Donor Activity***

Many bilateral and multilateral organizations (Pilot Program for the Brazilian Rainforest [PPG-7], USAID, GTZ, KFW, IDB) are supporting conservation efforts for various parts of the Atlantic Forest in Brazil. The Brazilian Ministry of the Environment/GEF is supporting a priority-setting initiative for the Brazilian portion of the Atlantic Forest mentioned above. Other



international non-governmental organizations such as The Nature Conservancy and Conservation International are actively developing Atlantic Forest initiatives in Brazil as well.

Although there are currently discussions in the IDB and World Bank related to protected areas in the Argentine portion of the Atlantic Forest, the only international NGOs supporting Atlantic Forest work in Argentina are WWF and IUCN. In Paraguay, The Nature Conservancy, USAID, and others have supported the Mbaracayu Natural Reserve and private reserves. The World Bank, GEF, GTZ, GEF and others have also supported development of the public portion of the protected area system in Paraguay. WWF is seeking to coordinate actions with all these organizations in order to promote synergy at the national and tri-national levels and to avoid duplication of efforts.

### **5. Proposed Program**

Although much of the remaining Atlantic Forest is located in Paraguay, to date the majority of conservation efforts for the Atlantic Forest have taken place in Brazil and Argentina. The USAID mission in Paraguay is interested in supporting World Wildlife Fund's efforts to strengthen Atlantic Forest and Upper Paraná River ecoregion-based conservation activities in that country. WWF therefore proposes a program for a five year period to increase the participation of Paraguayan institutions and individuals in Atlantic Forest ecoregion-based conservation. The program will contribute to mobilizing priority actions needed in Paraguay and integrate them with actions in Argentina, Brazil and elsewhere to assure the long-term conservation of the biodiversity of the ecoregion.

### **Implementation Plan - Year 1 (October 1, 1999 - September 30, 2000)**

*(note: USAID funds will be used to support actions in bold type. All other actions will be implemented with WWF matching funds and WWF partner funding.)*

### **Long-Term Objective I: Mobilize conservation action on an ecoregional scale**

**Anticipated Result I.A** (Strategic Objective): WWF Ecoregional Team capacity established to coordinate mobilization of conservation action for the Atlantic Forest at an ecoregional scale. Total level of effort for Result I.A: \$392,790 (\$127,475 USAID; \$265,315 WWF Match)

I.A.4. USAID funds will support a legal study, the salary and office in Asuncion for the WWF Atlantic Forest coordinator in Paraguay, and travel for the coordinator (travel in Paraguay and three international trips to Brazil and Argentina)

I.A.5. USAID funds will support salary and benefits for the international coordination of the WWF Atlantic Forest ecoregion team (coordinator - 5% time, communications support - 10% time) and administration of the contracts with partners in Paraguay (contracts administrator - 8% time). In addition, USAID funds will support 3 international trips for this Washington-based staff to Paraguay, the organization of 1-2 training events to build the capacity in ERBC of the WWF team and the Paraguay National Commission (including 10 trips to Brazil and Argentina)

### **Actions/Progress Indicators:**

1. Atlantic Forest Ecoregion program officer hired in WWF-Brazil (with sufficient infrastructure and team support available), participating in the development and monitoring of the Atlantic Forest Ecoregion-Based Conservation Plan and ensuring effective implementation of the plan in Brazil.
2. Coordinator hired (with sufficient infrastructure support available) and assuring effective communication and coordination among the member organizations of the Misiones Tri-National Forest Corridor Network.
3. Atlantic Forest program officer hired in Fundación Vida Silvestre Argentina (with sufficient infrastructure and support available), participating in the development and monitoring of the Atlantic Forest Ecoregion-Based Conservation Plan and ensuring effective implementation of the plan in Argentina.
4. **Establish the institutional relationships and develop a mechanism for coordination of Atlantic Forest activities in Paraguay and Paraguayan participation in ecoregion-wide activities.**

**Activities:**

- a. **During the first quarter of the fiscal year a consultant will conduct a legal study to determine the best way for WWF to hire a locally-based coordinator for Atlantic Forest activities in Paraguay.**
- b. **During the first quarter of the fiscal year WWF-US staff members will develop an agreement with an appropriate organization in Asuncion to provide an office infrastructure to support the work of the WWF Atlantic Forest Coordinator.**
- c. **During the first and second quarter of the fiscal year, WWF-US staff will identify and hire a Coordinator for Atlantic Forest activities in Paraguay.**
- d. **As soon as the WWF Atlantic Forest Coordinator in Paraguay is hired, he/she will actively communicate with the WWF Atlantic Forest Team (Atlantic Forest officers in Brazil, Argentina, the international Atlantic Forest coordinator in WWF-US, and USAID Paraguay) to revise an integrated 1-year work plan for the ecoregion complex, identifying specific actions to be conducted by each participant.**
- e. **During the second half of the fiscal year, the new coordinator will identify key Paraguayan stakeholder governmental and non-governmental organizations and organize a series of meetings among these participants to discuss WWF's role, the relationship with the tri-national and national Green Corridor initiative commissions, and to build positive relationships. Meetings will be conducted to discuss ERBC methodology, share experiences, identify capacity-building needs, receive training and technical assistance in key areas needed for ERBC, conduct strategic planning and monitoring of implementation of the ERBC process.**
- f. **During the second through fourth quarter the Paraguay Atlantic Forest coordinator will organize support for appropriate Paraguayan participation in international meetings and training events for the Atlantic Forest Ecoregion as well as fundraising efforts**

**Outputs anticipated:**

- a. **Consultant's recommendations of appropriate legal mechanism for hiring coordinator**
- b. **Agreement for use of office space**

- c. Coordinator hired
- d. Revised WWF Atlantic Forest ecoregion work plan, including a monitoring plan and detailed work plan for portion to be implemented by Paraguay coordinator
- e. Training needs assessment completed
- f. Relationships established with WWF-Brazil/SUNY and/or other institutions for provision of training for Paraguayan participants.
- g. Increased Paraguayan participation in international planning, coordination, fundraising and training events for the Atlantic Forest ecoregion.
- h. Increased Paraguayan capacity to lead and manage ecoregion-based conservation (ERBC) efforts with neighboring countries.

5. Assure sharing of lessons learned in WWF ERBC programs world wide with the WWF Atlantic Forest country coordinators and assure synergy of action among the three countries for the development, funding, and monitoring of a single biological vision and action plan for the entire ecoregion.

**Anticipated Result I.B:** A network of institutions with a shared vision for the ecoregion developed

Total level of effort for Result IB: \$42,452 (\$32,232 USAID; \$10,220 WWF Match)

USAID funds will be used to provide institutional support for the functioning of the Paraguay National Commission (This will include up to five international trips to Brazil and Argentina)

**Actions/Progress Indicators:**

1. Tri-national Forest Corridor network internal organization and action plan established and implementation begun

**Activities:**

- a. The Tri-national Forest Corridor initiative established an initial organizational structure and action plan at a meeting in August 1999. The structure consists of three national commissions (each with representatives of 6 sectors: government, scientific community, social NGO's, environmental NGO's, production, environmental law enforcement) and a tri-national commission consisting of one representative of each of the national commissions, and representatives of the international organizations WWF-US and UICN-Sur. Beginning in the first quarter, WWF-US staff will coordinate meetings and provide logistical and technical support to the tri-national commission to further refine the organizational structure to assure effective implementation of priority actions at the tri-national and national levels. In addition, the Paraguay Atlantic Forest coordinator, when hired, will provide technical assistance and encourage development of institutional relationships to implement the Paraguay National Plan for the Atlantic Forest completed at a workshop held in July 1999.

The Paraguay National Commission consists of:

- **Government:** Victor Vera, Direccion de Parques Nacionales y Vida Silvestre (Victor Vera is no longer in the position and a new representative must be identified)
- **Environmental NGO and representative to Tri-national Commission:** Ana Maria Macedo Sienra, Fundación Moises Bertoni
- **Social NGO:** Miguel Louvera, Sobrevivencia
- **Scientific community:** Jorge Pinazzo, Carrera de Ingeniería Forestal, Universidad Nacional de Asunción
- **Production Sector:** to be identified

**2. Atlantic Forest network organizations strengthened and integrated with WWF strategies.**

**Activities:**

- a. WWF-US staff and the Paraguay Atlantic Forest coordinator for Paraguay will coordinate actions, meetings, and training events so as to integrate WWF ecoregion-based conservation actions with network organizations in Paraguay and thus strengthen the local organizations.

**Outputs anticipated:**

1. Active participation of key Paraguayan individuals and institutions in implementation and monitoring of the tri-national action plan developed at the August 1999 Tri-National Initiative meeting and institutional relations strengthened.
2. Paraguay National Commission of the Tri-National Forest Corridor Initiative organizational structure established and functioning with active participation of all institutions involved.
3. Active representation of the Paraguay National Commission in the Tri-National Commission established in August 1999 to coordinate Tri-National activity of the Green Corridor initiative.

**Anticipated Result I.C:** Biological vision for the Atlantic Forest developed

Total level of effort for Result I.C: \$100,780 (\$28,780 USAID; \$72,000 WWF Match)

USAID funds will support Paraguayan scientific experts to compile data from Paraguay for the biological assessment of the Interior Atlantic Forest and participation of Paraguayan scientists in a biological vision workshop (This includes 5-10 international trips from Asuncion to Puerto Iguazú, Argentina).

**Actions/Progress Indicators:**

1. Participation of representatives from WWF-Brazil, Argentina & Paraguay in PROBIO (Brazil National) Atlantic Forest biodiversity priority setting workshop

**Outputs anticipated:**

- a. Methodology for PROBIO Atlantic forest workshop influenced to use ecoregions as the units for analyses
- b. Input from Paraguay & Argentina into Brazil process
- c. Argentina and Paraguay participants trained in PROBIO methodology
- d. Preliminary map identifying priority areas in Brazil and priority actions for Brazil

2. **Biological vision completed for the Interior Atlantic Forest and Araucaria ecoregions (these ecoregions cross the borders of the three countries):**
  - a. **Priority Areas map**
  - b. **Priority threats identified**
  - c. **Preliminary identification of priority conservation actions**

**Activities:** This action, already underway, is currently coordinated by Guillermo Placci, the WWF/Fundacion Vida Silvestre Atlantic Forest ecoregion coordinator, who is located in Puerto Iguazu, Argentina. He is working with scientific experts and GIS specialists in Argentina, Paraguay, and Brazil to produce an integrated base map of the two ecoregions in the three countries as well as data layers of forest cover, species ranges, habitat types, and other information important for landscape design and priority setting. During the first quarter, WWF-US and WWF-Brazil staff will be providing technical input, based on ERBC experiences in other regions throughout the world, to designing the priority-setting process. WWF-US will be providing small stipends to Paraguayan and Argentine experts to compile information needed for the data layers. Placci will organize a workshop in April 2000 to use the data compiled to complete the biological vision.

**Outputs anticipated:**

- a. **Atlantic Forest portion of Paraguay 1997 forest cover map ground truthed and revised for key areas using the same methodology as Brazil and Argentina**
  - b. **Integration of Argentina and Paraguay forest cover maps into PROBIO maps for Brazil to produce forest cover maps for the entire Araucaria and interior Atlantic Forest ecoregions**
  - c. **Ideal landscape designed (with priority areas selected, size and configuration) and principal threats identified with participation of experts**
3. **Strategy developed for completing biological vision, for the entire Atlantic Forest ecoregion complex**

Outputs anticipated:

    - a. **Results of PROBIO workshop analyzed and evaluated as to usefulness for developing biological vision**
    - b. **At the macro (Atlantic Forest complex) level: biological vision articulated and priority threats and policy action areas identified.**
    - c. **Priority areas selected in 2-3 ecoregions for pilot/demonstration landscape design.**
    - d. **Methodology for pilot landscape design and threat analysis developed and implemented for 1-2 priority areas selected and results disseminated.**
    - e. **Vision including root cause analyses completed for 1-2 ecoregions in the Atlantic Forest complex**
  4. **Diagnostic of gaps in research completed.**

## **Long-Term Objective II: Protect Key Sites and Wildlife Populations**

**Anticipated Result II.A:** Policy framework established for improved protection and management of existing protected areas

Total level of effort for result IIA: \$30,000 (WWF Match)

### **Actions/ Progress Indicators:**

1. Disseminate to Atlantic Forest decision makers experiences in three Brazilian states (Paraná, Minas Gerais, and São Paulo) with Ecological Value-Added Tax (ICMS Ecológico) incentives for creation and maintenance of protected areas.
2. Compile and disseminate lessons learned in site projects through a case study paper and a seminar for exchange of experiences among executants. The seminar will result in a geo-referenced database of individuals and institutions involved in conservation and sustainable development efforts throughout the Atlantic Forest ecoregion complex.
3. Using a scorecard system rate the level of implementation of existing protected areas and disseminate baseline ratings to encourage improvement. Design of the rating system is complete. WWF-Brazil has completed rating federal protected areas in Brazil and will begin rating state protected areas this quarter. FVSA will complete ratings for all protected areas in Misiones, Argentina by the second quarter.

**Anticipated Result II.B:** Continued implementation of integrated conservation and development projects to protect 3 key sites: Poço das Antas; Una; and the Misiones Tri-National Forest Corridor

**Anticipated Result II.B1:** Poço das Antas region (Rio de Janeiro, Brazil, coastal forest) forest fragments supporting a minimum viable population of golden lion tamarins  
Total level of effort for result IIB1: WWF partner funding

**Result II.B2:** Minimum viable contiguous forest conserved to assure conservation of a viable population of golden-headed lion tamarins - Una region (Southern Bahia state, coastal forest, Brazil)  
Total level of effort for result IIB2: WWF partner funding

**Result II.B3:** Misiones Tri-National Green Corridor recognized and made viable  
Total level of effort for result II.B3: \$132,077 (WWF match)

### **Actions/Progress Indicators:**

1. Basic presence of FVSA established in Urugua-í Reserve and first stage of implementation completed.
2. Official recognition of the corridor by the three countries: launch of Green Corridor map, promotion of provincial law in Argentina, and support for similar policies in Brazil and Paraguay.

**Anticipated Result II.C:** New protected areas created and implemented

Total level of effort for result II.C: \$3,000 (WWF resources prior to October 1, 1999) plus resources budgeted under I.C.

**Anticipated Result II.C1:** Priorities established for creation of new protected areas

**Anticipated Result II.C2:** Threats to integrity of ecoregion assessed and prioritized

**Anticipated Result II.C3:** Integrated tri-national Geographic Information System (GIS) map/database established for the ecoregion

**Actions/Progress Indicators:**

1. Satellite image-based map of remaining forest cover, watersheds, and existing protected areas, development plans, & priority areas completed for Atlantic Forest
2. Compilation and assessment completed of existing information on the biodiversity of the ecoregion complex needed to prioritize action.

**Long Term Objective III: Shape regional development to support conservation**

**Anticipated Result III.A:** Limit unsustainable use of the forest

Level of effort for result III.A: WWF partner funding

**Anticipated Result III.A1:** No unsustainable logging practices - commercial Atlantic Forest products operations certified.

**Actions/Progress Indicators:**

1. Forest Stewardship Council (FSC) standards for cellulose plantations (including protection for tracts of native forest) established for Brazil.
2. Alliances with forest corporations established / FSC standards adapted to the ecoregion: launch of the FSC goals and practices in Misiones Province of Argentina.
3. Strategy developed for certification system for heart of palm and other Atlantic Forest non-timber products

**Anticipated Result III.A2:** Logging moratorium in Brazil

**Actions/Progress Indicators:**

1. Logging extent and impacts documented and disseminated.

**Anticipated Result III.B** Promote alternative sustainable use of the forest in Misiones province, Argentina

Level of effort for Result III.B \$36,200 (WWF match)

**Result B1:** Results of sustainable use pilot projects disseminated

**Actions/Progress Indicators:**

1. Potential sustainable uses of the forest identified and priorities for further investment defined.

Outputs:

- a. Results of 5 pilot projects disseminated at Tri-National meeting
  - b. Continuity of successful projects assured & new projects initiated
  - d. Permanent funding mechanism established for pilot projects
2. Methods developed and disseminated for prevention of jaguar predation on livestock in the Green Corridor area

**Anticipated Result III.C:** Establish a land use policy framework that supports conservation  
Level of effort for Result III.C: WWF partner funding

**Anticipated Result III.C1:** Controls on logging strengthened and enforced; ban on deforestation in Brazil maintained and enforced; a broad legal definition of Atlantic forest ensured

**Anticipated Result III.C2:** Land reform policy compatible with protection of the forest; landless people's invasions focused on non-forested areas

**Actions/Progress Indicators:**

1. A model for land reform compatible with conservation developed (with Una project in Southern Bahia) and disseminated.
2. Impacts of agrarian reform on Atlantic Forest conservation and alternatives to mitigate the impact, documented and disseminated
3. Brazilian land reform agency (INCRA) policy influenced to reduce the impact of agrarian reform on Atlantic forest

**Anticipated Result III.C3:** Feasible economic incentives for protection of Atlantic Forest identified

**Long-Term Objective IV: Establish long-term conditions and capacities needed to sustain conservation**

**Anticipated Result IV.A:** Public awareness of the value of the Atlantic Forest increased  
Level of effort for result IV.A: WWF partner funding

**Anticipated Result IV.A1:** Value of ecological services of protected forest disseminated to the general public and decision makers

**Anticipated Result IV.B:** Funding mechanisms developed to provide sustained funding for Atlantic Forest Conservation

Level of effort for result IV.B: \$36,512 (\$11,512 USAID; \$25,000 WWF match)

USAID funds will support technical assistance to the Paraguay National Commission to develop funding proposals and design a funding mechanism.

**Actions/Progress indicators:**

1. Proposals developed to the GEF from each of the countries



**Activities:**

WWF has supported a consultant to establish a working group in each of the three countries which is producing project concepts to be used as a basis for large-scale funding proposals for Misiones Tri-National Forest Corridor conservation actions. Coordinator in Argentina is the Misiones Province Ministry of Ecology, and the proposal focuses on implementation of the Green Corridor legislation when passed. The proposal will be reviewed in the first quarter, and efforts to identify potential donors should begin in the second quarter. In Brazil, the working group is still in the beginning stages of organization. In Paraguay, preliminary concept documents have been compiled from a variety of players. In the second quarter, the WWF Atlantic Forest coordinator will assist the working group to define responsibilities and encourage an editorial group to revise and consolidate the preliminary documents. By the fourth quarter, potential donors should be identified and formal presentations of the proposal for consideration would begin. In addition, work will begin to determine the feasibility of other types of conservation funding mechanisms such as corporate funding, trust funds and debt swaps.

**Outputs anticipated:**

1. Funding proposals completed for Paraguay and Argentina
2. Potential donors identified
3. Feasibility study of funding mechanisms completed for Paraguay

## **SOUTHWESTERN AMAZON ECOREGION IMPLEMENTATION PLAN**

The Southwestern Amazonian forests of western Brazil, northern Bolivia, and southeastern Peru support a wide range of forest types, which are considered to be among the Earth's most biologically rich. This region, with its distinctive ox bow lakes, is home to macaws, curassows, harpy eagles, tapirs, giant river otters, howler monkeys, and jaguars. This region possesses among the highest freshwater fish, bird, and butterfly diversity in the world. Ninety-four percent of the ecoregion's original forested area remains forested today, but threats from rapid population growth, road construction, logging and agriculture are placing this ecoregion at risk.

For over twenty years, WWF has worked with key partners in the region to establish protected areas and conserve natural resources. Since 1998, a new phase was initiated with the formation of an ecoregional team and the implementation of biological and socioeconomic assessments in each country, aimed at developing more comprehensive and intensive programs to conserve the area's biodiversity. In Bolivia, the assessments identified three priority areas of significant biological importance and potential to promote conservation: Manuripi Heath and its surrounding areas, the ecological corridor that extends from Amboro National Park to the Madidi National Park, and the Mamore-Guapore ecological corridor. Of these three, the Amboro-Madidi corridor is of greatest importance in terms of biodiversity. The corridor includes approximately 4 million hectares of protected areas and 600,000 hectares of indigenous reserves. The protected areas are managed by the National Park Service (SERNAP) and in several cases, are managed in conjunction with NGOs and indigenous groups.

### **Long-Term Objective I: Mobilize conservation action on an ecoregional scale**

Total level of effort: US\$160,000 (WWF Match)

#### **Anticipated Result A: Develop a Biodiversity Vision and Ecoregional Conservation Action Plan**

Level of effort: US\$160,000 (\$45,000 for representational analysis; \$115,000 for investigation to ground-truth the biodiversity vision)

In the Southwestern Amazon (SWA) ecoregion, the complexity of the native flora and fauna, coupled with the fact that large areas remain untouched by taxonomists, makes it difficult if not impossible to create biodiversity maps based on species-level data. Thus, a thorough biodiversity assessment must include indicators or proxies that predict patterns of species distributions. For example, vegetation maps, produced from satellite images can be considered as indicators of major distribution patterns of plants and animals. These data can be further refined by including elevation data and geo-morphological data in the analysis.

In order for the Ecoregional Based Conservation (ERBC) process to proceed in the SWA, it is essential to create a biodiversity vision: a tool with which to set priorities for conservation based on biological and ecological characteristics of the ecoregion and to ensure the representation of overall ecoregional biodiversity within protected areas and conservation programs. In order to create this vision, a proxy of biodiversity patterns, based on the best indicators available, is being generated through the combination of vegetation data, elevation, and geo-morphology. The

integration of these three sets of data will delineate what are known as landscape units; each landscape unit has a unique combination vegetation type, elevation, and geo-morphology. The assumption is that each of these landscape units also supports a unique vegetation type with unique biodiversity.

With the creation of the landscape units map, the next step in the planning process is to compare the distribution of landscape units with that of protected areas in the ecoregion to assess how well the units are captured or represented within protected areas. This representation analysis will quantify the level of existing protection for all habitat types, as indicated by landscape unit proxy, and thereby identify gaps in protection (this procedure is also known as a gap analysis). From the representation analysis, the WWF staff and collaborators will derive a plan for ensuring that all gaps in habitat protection are eliminated through the creation of conservation landscapes composed of a mosaic of protected and sustainable use areas. The team that is working to obtain the biological vision and action plan for the Southwestern Amazon ecoregion includes technical staff from WWF headquarters, WWF-Peru, WWF-Bolivia, WWF-Brazil, and key partner organizations that have been involved in the ecoregional process since 1998. In Bolivia, the NGO Fundación Amigos de la Naturaleza (FAN) conducted the biological and socioeconomic assessments of the Bolivian portion of the SWA. WWF-Brazil hired several individual consultants to conduct studies. In Peru, the Center for Conservation Data (at the La Molina University) and the Institute for Research in the Peruvian Amazon (IIAP) in Iquitos have carried out biological and socioeconomic analyses for the Peruvian portion of the ecoregion. CDC and IIAP continue to be involved in the process, particularly in the cartographic analysis.

In the activities outlined for the first year of implementation of this result (development of a biodiversity vision and conservation action plan), the emphasis will be primarily on the biological arena. Treatment of policy and socioeconomic work will be minimal during this initial period, but will be increasingly addressed in future years, once the action plan for the ecoregion is completed.

Outputs Anticipated:

- Combined SW Amazon Ecoregional maps of vegetation, major land use and land tenure, geomorphology, and altitude.
- Ecoregional map of landscape units for the entire Southwestern Amazon ecoregion.
- Biodiversity Vision for the Southwestern Amazon (graphic and text).
- Database with maps for analyzing socioeconomic opportunities and threats to conservation.
- Conservation Action Plan for the ecoregion, based on biological and ecological criterion combined with socioeconomic characteristics.

**Long-Term Objective II: Protect Key sites and Wildlife Populations**

Total Level of Effort: US\$250,000 (\$150,000 USAID; \$100,000 WWF Match)

**Anticipated Result B: Consolidation of an Ecological Conservation Corridor (Amboró-Madidi)**

Level of Effort: US\$150,000 (USAID)

A biological and socio-economic assessment of the Southwestern Amazon in Bolivia recently completed by Fundación Amigos de la Naturaleza (FAN) for WWF-Bolivia identified three priority areas of

significant biological importance and potential to promote conservation. Of these three, the area of greatest importance in terms of biodiversity is a string of national parks and indigenous reserves (TCOs) located along the eastern foothills of the Andes Mountains beginning with the Amboró National Park at the southern limit and extending northward to the Madidi National Park. This corridor links up with the Tambopata-Candamo, Bahuaja-Sonene, and Manu protected areas in Peru and future ecoregional planning lends itself to extending the corridor of managed and protected areas to Manu Reserved Zone and National Park in Peru. Activities for creating and managing a bi-national park with Madidi and Tambopata have been initiated and SERNAP (The National Service of Protected Areas) has funding for additional meetings to support the process of developing sound management of these protected areas. The result will be an extensive Ecological Corridor that forms a core conservation area within the SW Amazon Ecoregion, currently including 2,340,420 ha under strict protection, 2,415,530 ha under multiple-use protection and 225,000 ha proposed for protection.

As a key mechanism for broad-based collaboration between stakeholders, an Ecological Corridor Working Group (ECWG) will be formed to include the Directors of the National Parks and representatives for the *Comités de Gestión* (where they've been established), representatives of indigenous territories (TCOs) and representatives from NGOs working in conservation in the proposed area. WWF with SERNAP will initiate this group and establish a process that can begin to identify the most appropriate role for each of the representatives. This group will be formed with the common understanding of participating in the process of conservation planning and implementation. This includes developing a Biodiversity Baseline and Monitoring and Evaluation System and Ecological Corridor Conservation Plan. Each member organization of the ECWG will be responsible for progress in Monitoring and Evaluation in their area of influence, adhering to the guidelines established by the ECWG.

Implementation of the plan includes proposals for leveraging funding from WWF as well as from the individual stakeholders to ensure long-term financial sustainability. As the project is developed and incorporated into the conservation plan of each stakeholder organization, additional funding will be channeled to the Corridor Conservation Plan by the stakeholders via their individual funding sources. In addition, leveraged funding is anticipated with the implementation of the Monitoring and Evaluation Plan (by ECWG members) and the integration of monitoring systems within the corridor (as facilitated by the SW Amazon coordinator and SERNAP advisor). Following GEF II soon to be initiated, it is envisioned that with this corridor as a model GEF III would be support for ecological corridors throughout the area.

To further support work in improving bottom-up management practices on biodiversity conservation, WWF will also focus on policy development and interactions with multinational organizations (such as the hydrocarbon and mining industry). This will help to strengthen the capacity of SERNAP and the ECWG to face the major national and multinational threats that oppose conservation and protection activities within the corridor.

Due to the late initiation of project activities and the limited amount of funds available during the first year, initial activities will focus on the establishment of the biological and sociological databases for the corridor and the system for monitoring and evaluation. The databases will be developed and maintained by the Science Department of the Fundación Amigos de la Naturaleza (FAN). Actual data collection for the databases will be minimal during the first year. Specific socioeconomic, policy, and capacity

strengthening activities will be addressed in greater detail in future Implementation Plans, and subject to the availability of additional financial resources. Likewise, fundraising activities will not be initiated during the first year of activities. These will be outlined in greater detail in the conservation action plan to be developed during the current year.

List of Key staff:

SWA Coordinator (WWF)  
Monitoring and evaluation advisor (Fundación Amigos de la Naturaleza - FAN)  
Protected areas management and design advisor (SERNAP)  
Scientific team coordinator: Dr. Pierre Ibish, ecologist (FAN)

- *Activity 1.1:* SWA coordinator (WWF) and SERNAP advisor coordinate and facilitate the initiation of a collaborative structure for defining and managing the corridor. November 1999.

WWF will function as a facilitator for the development and execution of the corridor conservation plan. Local interest has been demonstrated from the government in their desire to develop corridor-based conservation plans in order to coordinate conservation efforts in Bolivia. Protected area management interests will be represented by SERNAP and will therefore take a major role in developing the vision for the corridor. FAN is the local conservation organization who will develop the vision and the M&E plan, and help with biological assessments for developing and monitoring the corridor action plan. Both of these organizations are local promoters of ERBC in Bolivia. Workshops for integration and dissemination of information are key, and are detailed in the proposal. This year will have only one general workshop due to short time and funds, but another will be planned for early next fiscal year.

Initial planning meeting:

FAN, who will design and develop the database for Baseline and M&E  
WWF Bolivia Coordinator (Henry Campero)  
SERNAP (to assure representation of protected areas)

First Corridor Stakeholder Workshop:

FAN – to present database and M&E system design  
SERNAP to coordinate collaboration and participation  
WWF (Bolivia Coordinator) to moderate  
Representatives of Indigenous Organizations (5 organizations)  
Representatives of major communities (6)  
Local and National Government reps. (4)

- Results anticipated: Ecological Corridor Working Group (ECWG) organized. Roles and Responsibilities identified among the group.
- Level of effort: US\$26,258
- *Activity 1.2:* Gather information (field-based and databased) to establish a complete and updated biological and sociological database for the corridor. Initiated November 1999 and

maintained throughout project development and implementation by local NGO Fundación Amigos de la Naturaleza (FAN, Science Department).

- Results anticipated:
  - (1) Field-based biological and ecological assessments completed to inform conservation decisions.
  - (2) Integration of data from established monitoring systems.
  - (3) Formation of conservation database.
- Level of effort: US\$24,175
- *Activity 1.3:* Conduct analysis of biological and socioeconomic data.
  - Results anticipated:
    - (1) Ecological zoning and protection plan designed for the corridor, including maps of biological (species distributions, habitat and landscape characteristics, indicators) and socioeconomic (threats, focal activities) components (FAN).
    - (2) Evaluation of current status of biodiversity conservation (gap analysis, habitat representation, viability of protected areas - FAN/ECWG).
    - (3) Analysis of existing management plans and control of protected areas (SERNAP).
  - Level of effort: US\$75,058
- *Activity 1.4:* Initiate development of Ecological Corridor Conservation Plan and Biodiversity Monitoring and Evaluation System
  - Results anticipated: Analysis performed to develop Conservation Plan and Monitoring and Evaluation System.
  - Level of effort: US\$12,088
- *Activity 1.5:* Initiate development of Biodiversity Monitoring and Evaluation System with the ECWG
  - Results anticipated: Steps made toward developing plan for community-based monitoring of threats and indicators (communities informed, indicators identified, education process begun) (SERNAP, FAN, CARE).
  - Level of effort: US\$12,421

**Anticipated Result C:** Develop a Conservation Program for the Manuripi-Heath Reserve and surrounding area

Level of Effort: US\$100,000 (WWF Match) (\$50,000 for salaries, WWF and Herencia staff; \$15,000 for project materials and supplies; \$15,000 for travel; and \$20,000 for a vehicle)

One of the priority areas determined by the ERBC biological and socioeconomic assessment is the heart of the department of Pando, centered around the Manuripi-Heath National Reserve. The reserve, created in 1973, is just starting to become an active protected area with the new hire of a Director and corps of Park Guards. However, since 1973 many colonists have formed small farming and hunting communities within the reserve. In addition, private land owners (barraqueros), who since the rubber boom have managed large tracts of land for rubber collection and Brazil nut harvesting, are actively extracting both timber and non-timber resources without management plans or environmental consideration. Resolution of land tenure issues and practical plans for managing resources are in great need for the area within and surrounding the reserve if the Amazonian ecosystem is to be conserved. Great expanses of forest are still relatively intact with few areas of fragmentation, however strong pressures from the cattle ranching sector are beginning to cause deforestation of the forested landscape.

Due to the strong market for Brazil nuts and the dependence of the local people on hunting for survival, the conservation of these forests and their biodiversity has obvious economic as well as biological value. Proper management of resources is necessary to ensure biodiversity conservation.

The complex land ownership and natural resource exploitation and management issues described above will be duly considered in the ecoregional threat analysis and in the action plan that will be developed for the ecoregion during the current year. Thus, the resulting action plan will allow WWF and partner organizations to address these topics on a larger scale within Bolivia as well as across national borders.

Outputs Anticipated:

- Strengthen the presence and institutional capacity of the local NGO Herencia to design and carry out conservation oriented programs in the Manuripi Reserve. The exact nature of these conservation programs will be outlined in the ecoregional action plan to be completed during the current year, both at the ecoregional level and in specific sites within Bolivia.
  - Permanent office established in Cobija
  - Permanent technical and support staff hired
  - Training of technical personal and support staff
- Herencia will elaborate a series of diagnostic reports concerning the biodiversity conditions, economic situation and social issues that influence the use of natural resources and their conservation within the Reserve and surrounding areas.
  - Study and evaluation of natural resource use and identification of biodiversity threats, including a diagnosis of the state of biodiversity and a strategy for community-based monitoring.
  - Diagnosis of the social situation (land ownership, stakeholder analysis).
  - Diagnosis of conflicts and defined strategies for their resolution.
- Herencia will work to strengthen the social and community organization to develop a conservation plan for the Reserve, focusing on sustainable natural resource use.
  - Contacts made and dialog opened between prominent stakeholders in the region (the local government, civil society and SERNAP administration).
  - Raise level of conservation consciousness with municipal government, communities, and landowners.
  - Strengthen local communities and organizations with environmental education programs, participatory monitoring and planning of natural resource use, and participation in the Comité de Gestión of the Reserve.
- Herencia and the local University (Universidad Amazónica del Pando) will elaborate projects and programs to promote conservation in the area of the Reserve

**The Sulu-Sulawesi Marine Ecoregion Conservation Program – Implementation Plan**  
**Goal: To conserve the full extent of biodiversity in the SSME - WWF Match - \$507,125**

Through an ERBC approach, the SSME Conservation Program will develop an Ecoregional Conservation Plan while simultaneously strengthening protection at critical sites. While the development of the Ecoregional Conservation Plan is underway, key actions are needed to support long-term conservation, both in broad-scale policy and specifically at sites already known as priority areas. As a result, WWF has launched several efforts to increase conservation action at key priority sites including Tubbataha Reefs National Marine Park, Anilao Marine Protected Area in the Philippines, Bunaken National Marine Park in Indonesia, and Semporna Island in Malaysia. These ongoing site-based efforts are designed to limit ecosystem destruction while planning for long-term conservation takes place.

**Specific Objectives for Support from USAID**

USAID's support is contributing to a larger effort to mobilize conservation action at the scale of the SSME. Currently, the majority of these efforts are being pursued in the Philippines; however, WWF's interventions in Indonesia and Malaysia are also being strengthened. WWF-Philippines, Indonesia and Malaysia all participate in a SSME coordinating committee and collaborate on ERBC planning. Additionally, WWF offices work together on implementation in areas that specifically require transborder cooperation such as fisheries management.

Given the complexity of this Ecoregion-based conservation effort, WWF has programmed USAID funds where they will be most effective and needed. As a result, the activities outlined in this implementation plan for USAID funding should be considered in the context of the entire SSLME Program comprised of ten major components. The following components are being pursued over the next decade:

- 1. Assessment and strategic planning at the scale of the ecoregion to collaboratively prioritize conservation interventions.**
- 2. Establishment of regional management regimes and strengthening of institutions for management of fisheries, threatened species, and pollution**
- 3. Cooperation with the private sector to create sustainable investment portfolios for the region.**
- 4. Strengthening and integrating a network of marine protected areas to prevent destructive resource use, while simultaneously operationalizing an effective protection and law enforcement system for priority areas**
- 5. Establishment of innovative sustainable marine and coastal livelihood systems in priority areas**
- 6. Acquisition and dissemination of sufficient scientific knowledge of the ecoregion to enable ecosystem monitoring, informed decision making, and adaptive management**



- 7. Increasing awareness among stakeholders regarding the importance of marine and coastal conservation**
- 8. Building of capacity for resource management among stakeholder groups including Government, local communities, and people's organizations**
- 9. Development of a financing strategy to ensure long-term financing of sustainable development efforts in the ecoregion**
- 10. Increasing sustainability through effective policy research and advocacy**

**Within the context of the SSME Program, USAID funding has been programmed to support four specific objectives:**

- 1. Enhance Conservation Action at Critical Sites within the SSME**
- 2. Improve Awareness and Understanding of the Importance of Marine Conservation in Critical Sites in the SSME (focus on Palawan)**
- 3. Increase Understanding of Conservation Priorities and Needs Across North Sulawesi and East Kalimantan as part of the ERBC Planning Process**
- 4. Use market forces to transform the marine ornamentals industry in the Philippines and Indonesia into one based on quality and sustainable use of coral reefs by developing third party certification system**

#### **OBJECTIVE 1: TO ENHANCE CONSERVATION ACTION AT CRITICAL SITES WITHIN THE SSME**

USAID funds will focus on enhancing conservation action at 4 sites in the SSME which are urgent conservation priorities: Tubbataha, Anilao, Semporna, and Bunaken. At Tubbataha and Anilao conservation will be pursued through an Enforcement Campaign. In Bunaken and Semporna, conservation will be pursued through support to Marine Protected Area projects.

##### **Activity 1.1: Enforcement Campaign in Tubbataha and Anilao, Philippines**

In January of 1999, WWF-Philippines launched the SSME Marine Enforcement Campaign. This program was endorsed by six Cabinet Members of the Philippines and is striving to immediately halt marine resource destruction at critical sites across the SSME. Tubbataha Reefs National Marine Park and Anilao Marine Reserve are the two initial Enforcement Campaign sites. The campaign is increasing the number of patrols at Marine Protected Areas, training resource agencies in enforcement and para-legal techniques, building institutional capacity to take on enforcement actions, undertaking biological monitoring to understand resource conditions and changes.

In Tubbataha, MPA enforcement is undertaken by a Field Team including representatives of several stakeholder groups (The Department of Environment and Natural Resources, The Department of Defense, Local NGOs, WWF, and Local Government): The enforcement crusade

was launched in the Philippines in January of 1998 and will take place throughout FY 99 and FY 2000.

WWF is concerned that enforcement efforts be strengthened but at the same time these efforts must be designed to be sustainable. Patrolling and enforcement will be required into perpetuity to ensure the protection of priority marine protected areas. As a result, WWF is enhancing enforcement through donor funds while simultaneously facilitating sustainable financing strategies. For example, at Tubbataha, WWF has facilitated the Tubbataha Protected Area Management Board's initiative to set up a user fee system and endowment for the park to support recurring conservation costs.

Specific activities supported by USAID include:

- Daily Patrols (for 3 out every 4 weeks - by a Field Team comprised of WWF staff, representatives of other NGOs, community-members, and military escorts) to enforce Marine Protected Area Regulations and dissuade violations (USAID funds will support staff, fuel, and equipment for these patrols)

**Level of Effort for the Activities at Tubbataha: \$ 44,350 (USAID)**

In Anilao, MPA enforcement is undertaken by the Multisectoral Group (comprised of community members, representatives of local government units, and WWF staff) for the Conservation of Anilao and will take place throughout FY 99 and 2000.

Specific activities supported by USAID include:

- Daily Patrols by Field Teams comprised of KKP staff, local community representatives, representatives of local government units, and local NGO representatives to enforce Marine Protected Area regulations (USAID funds will support staff, fuel, and equipment for these patrols)
- 2 Workshops to train the local Multisectoral Group in regulation enforcement techniques, conservation management, and organizational management
- A community grant to support the establishment of an alternative livelihood scheme (such a grant will purposely be small to remain appropriate within the cultural and economic context). Potential livelihood projects include the culture of high value sea grasses, making of craft items to sell to dive tourists, and introduction of sustainable aquarium fish trade. Additional donor funds from the Packard Foundation and others are being applied to the development of alternative livelihood schemes throughout the SSME.

**Level of Effort for the Activities at Anilao: \$ 37,150 (USAID)**

**Result/Output 1.1: Enhancement of the Marine Enforcement Campaign at Tubbataha, Anilao (Halting of Destructive Activities) \$ 81,500 (USAID)**

**Activity 1.2: Conservation Efforts at Bunaken and Semporna Island**

Bunaken: WWF is currently supporting a coelacanth conservation project in Bunaken (USAID funds in combination with co-financing will be used to expand this project to include ecosystem conservation). Mark Erdmann, a well-known coelacanth researcher is in charge of this project which is ongoing during FY 1999 and FY 2000.

Specific activities supported by USAID include:

- Assessment of information and capacity needs to strengthen ecosystem and species conservation in and around Bunaken
- Studies to assess the impact of demersal and shark fisheries on the marine ecosystem and coelacanth populations and development of strategies to mitigate these impacts
- Coelacanth surveys at other sites in Indonesia attempting to identify other populations
- Monitoring of coelacanth, sea turtle, dugong, and shark catches
- Training of a cadre of 36 local reef watchers to monitor and dissuade illegal wildlife captures within the park
- Development of an alternative livelihood strategy focusing on craft production for tourists to Bunaken. This effort will be tied to conservation through extensive community education and outreach efforts conducted by local organizations with the support of WWF. Through the combination of alternative livelihood schemes and conservation education, it is hoped that fisherman which are likely to have the most impact on coelacanth will shift away from potentially damaging fishing (such as bottom fishing). Community consultation indicates that fishermen are willing to do this if alternatives are available. Community education will include village meetings and education modules, video and live presentations, distribution of printed education materials, and training of local reef watchers association for them to act as informal outreach agents. These efforts must be combined with patrolling to prevent incursion from other fishers.

**Level of Effort for the Activities at Bunaken: \$ 24,000 (USAID)**

Semporna Island:

Specific activities supported by USAID include:

- Environmental Education for marine conservation. The goal of this initiative is to increase community support for protection activities at Semporna by raising awareness regarding conservation and resources sustainability.
- Community-based implementation of the management plan that is under development

**Level of Effort for the Activities at Semporna: \$ 12,000 (USAID)**

**Result/Output: 1.2: Enhanced Conservation Action at Bunaken and Semporna Island. \$36,000 (USAID).**

**OBJECTIVE 2: TO IMPROVE UNDERSTANDING OF THE IMPORTANCE OF MARINE CONSERVATION IN CRITICAL SITES IN THE SSME (FOCUS ON PALAWAN).**

Throughout the LME, resource conservation is confounded by a lack of understanding of and participation in conservation activities by local stakeholder groups. This is particularly the case in Palawan where marine resource exploitation continues to degrade biologically critical sites and species such as dugong and their habitats.

**Activity 2.1: Education and Awareness Activities in Palawan.**

Drawing on the significant efforts that have already taken place in the region and the Philippines, the education and awareness work will take place in 5 municipalities in Palawan where marine resource exploitation is threatening important systems and species. WWF has ongoing conservation projects in each of these municipalities and hopes to increase community participation in these projects through the formation and strengthening of local community conservation groups. The ongoing conservation projects include community patrolling and alternative livelihood schemes to reduce the threat of destructive and illegal resource exploitation such as overfishing and cyanide and dynamite fishing. The education and awareness work is intended to increase awareness about the benefits of the conservation projects among local people and the local conservation groups and create enthusiasm for participation in these efforts. The activities will be implemented by WWF-Philippines Education and Awareness Staff which has considerable experience delivering environmental education programs and will take place over the course of FY 99 and FY 2000. The target of these activities is coastal barangays. Recent legislation in the Philippines has enabled coastal communities to establish marine protected areas. As a result, WWF hopes to improve awareness and set the foundation for expansion of the community-based marine protected area system through first exposing communities to environmental messages and concepts.

Specific activities supported by USAID include:

- Delivery of Marine Conservation Awareness Kits
- Community Workshops and Information Seminars
- Slide Show Presentations
- Video Presentations
- Radio Plugs
- Forming and strengthening of Community-based Conservation Groups. The NGO and CBO network in Palawan is very strong. As a result, WWF will work with these groups such as the Palawan Network of NGOs Inc. (PNNI) to strengthen community-based conservation groups.

**Level of Effort for the Activities in Palawan: \$ 46,750 (USAID)**

**Results/Output 2.1: Improved Understanding of and Participation in Marine Conservation by Stakeholder Groups in 5 Municipalities of Palawan. \$46,750 (USAID).**

**OBJECTIVE 3: TO INCREASE UNDERSTANDING OF CONSERVATION PRIORITIES AND NEEDS ACROSS NORTH SULAWESI AND EAST KALIMANTAN AS PART OF THE ERBC PLANNING PROCESS. CO-FINANCING:**

Of all areas of the SSME, North Sulawesi and East Kalimantan are the least understood in terms of their important marine resources as well as threats to these resources. As a result, a portion of LWA funds will be used to undertake assessments of coral reefs, mangroves, and sea turtle habitats as well as threats and conservation needs in these areas. These assessments will feed directly into the ERBC planning process for SSME. These assessments are critical both to the development of the Ecoregion Conservation Plan and to the formulation of targeted conservation action to be implemented through other donors' support or subsequent LWA funding.

**Activity 3.1: Assessments in North Sulawesi and East Kalimantan**

As part of efforts to develop a conservation action strategy for the Sulu-Sulawesi Sea, WWF is undertaking assessments to better understand critical marine resources and threats in North Sulawesi and East Kalimantan. These assessments primarily include literature reviews, consultation with experts, and site visits to priority areas. The conservation action strategy will be developed with numerous partners over the course of the next year following an Ecoregion-based conservation approach. This includes: biological and socioeconomic assessments, workshops to develop a biological vision for conservation of the SSME, workshops to develop a collaborative strategic conservation action plan, and WWF planning to develop a WWF action plan to implement parts of the collaborative action plan.

Specific activities supported by USAID include:

- Biological assessment through secondary data and site visits
- Threat assessment through secondary data, interviews, and site visits
- Liaison with and information gathering from Government Agencies and local organizations
- Support to the development of the strategy for conservation action and more detailed assessment at critical sites

**Level of Effort for the Assessments in North Sulawesi and East Kalimantan: \$ 24,000 (USAID)**

**Result/Output: Improved understanding of critical marine resources and threats to North Sulawesi and East Kalimantan upon which to base ERBC conservation strategy development. \$ 24,000 (USAID)**

**OBJECTIVE 4: TO USE MARKET FORCES TO TRANSFORM THE MARINE ORNAMENTALS INDUSTRY IN THE PHILIPPINES AND INDONESIA INTO ONE BASED ON QUALITY AND SUSTAINABLE USE OF CORAL REEFS BY DEVELOPING THIRD PARTY CERTIFICATION SYSTEM.**

**Activity 4.1:** Establish capacity and network for marine aquarium species certification development and implementation in the Philippines and Indonesia

The Marine Aquarium Council (MAC) Director, Representatives of MAC partners in the Philippines and Indonesia will work together during the first quarter of 2000 to undertake the following activities supported by USAID:

- Establishment of a full-time MAC presence for the key collection and export areas of the Philippines and Indonesia is needed to accelerate the understanding of certification by continuing and expanding stakeholder consultations, organizing workshops and training, developing the MAC network, and coordinating certification piloting and implementation. This will be achieved by placing coordinators in Indonesia and the Philippines who will regularly work in key collection and export areas. These coordinators will work with both local and international NGOs and with their assistance will support collectors and exporters to develop sustainable harvest and shipment methods. This will include providing these collectors with educational materials and briefings on MAC certification and helping them to access training in the methods of collection, handling, and ecosystem management necessary to achieve MAC certification. This training will mostly be provided by other NGOs such as WWF and the International Marine Alliance (IMA). The coordinators will also work with government to encourage their support for MAC certification in each country. This will include regular dialogue with key decision makers, assistance with drafting of regulations as needed, and refinement of MAC standards for the context of each country.
- MAC Director and representatives of in country MAC partners will develop Terms of Reference and advertise position.
- MAC Director and representatives of in-country MAC partners will identify and agree on office situation that is effective and cost efficient, but maintains independent, 3<sup>rd</sup> party status and credibility of MAC.
- MAC Director and representatives of in-country MAC partners will establish selection committee, interview candidates and make selection.

**Result/output: MAC capacity expanded to enable consultations with stakeholders and network development. MAC capacity created for organizing training and testing of certification.**

**Level of Effort for the Activities to Expand MAC capacity: \$ 29,981 (USAID)**

**Activity 4.2.** Undertake Stakeholder Consultations and Network Development in the Philippines and Indonesia

The MAC Coordinators in the Philippines and Indonesia, the MAC Director, and Representatives of in country MAC partners will undertake Stakeholder Consultations in the first quarter of FY 2000 and continue with these consultations and network development throughout FY 2000. MAC Partners include select collectors, exporters, retailers, NGOs, industry associations, government agencies, and others.

Specific activities supported by USAID include:

- Undertaking consultations through meetings, workshops, and direct dialogue with collectors, traders, government officials, and NGOs to establish familiarity with certification as an approach to addressing the issues of the marine ornamental trade and to support development of a multi-stakeholder network to promote certification.
- Developing a multi-stakeholder network of support for MAC certification in Indonesia and the Philippines. This network will include collectors, exporters, retailers, industry associations, NGOs, government agencies, and other interested parties. The network will be informal communicating through email, periodic meetings, and professional fora. The network will work to support MAC certification through the various strengths and capacities of its members.
- Regularly contacting other important stakeholders that are outside the network (but may become members of the network), e.g. government agencies, companies, industry associations, NGOs, community groups, fishermen associations, etc. to inform them regarding certification and to encourage their support for and participation in certification.
- Providing written and oral educational and technical information on aquarium industry issues and certification to increase knowledge of the industry and help to promote certification. This will include profiles and lessons learned on attempts to achieve certification to help others in their pursuit of certification.
- Organizing briefing sessions on certification by MAC Director, MAC Philippines/Indonesia Coordinator, and/or in country organizations and agencies supporting MAC certification.
- Organizing technical support and training on key issues that are important to the certification process such as collection, handling, natural resource management.

**Result/Output: Greater range/number of stakeholders understanding certification and involved in MAC network. Expanded stakeholder participation in workshops and training on certification. Expanded participation in certification testing and implementation.**

**Level of Effort for the Activities to Develop the MAC Network in the Philippines and Indonesia: \$ 6,000 (USAID)**

**Activity 4.3: Convene Multi-stakeholder Workshop in Indonesia**

The MAC Philippines/Indonesia Coordinator, the MAC Director, and MAC partners in Indonesia will undertake this activity in the second quarter of 2000. Several stakeholders in Indonesia including the Indonesia Ecolabeling Institute (LEI), marine ornamentals industry participants, NGOs, government officials, and others will participate in this multi-stakeholder workshop. The workshop will inform stakeholders about certification and lay out a framework of action to collectively pursue certification in Indonesia.

Specific activities supported by USAID include:

- Working with partners, MAC will identify participants, develop agenda and organize logistics.

- If needed, a consultant will be engaged to assist with arrangements and logistics.
- Convening of a 2-day workshop to lay out a collective framework of action to pursue certification in Indonesia.

**Level of Effort for the Activities to Convene a Multi-stakeholder Workshop in Indonesia: \$ 24,000 (USAID)**

**Result/Output: Improved understanding of marine aquarium industry and certification among stakeholders, increased interaction among stakeholders, expanded and strengthened network on certification, identification of key issues, opportunities and priorities for certification, and indicative workplan for developing certification in Indonesia. \$ 24,000 (USAID)**

**Activity 4.4:** Undertake testing and training for certification implementation in the Philippines and Indonesia.

The MAC Philippines/Indonesia Coordinator, MAC partners and network members, the MAC Director, and a Consultant will undertake this activity during FY 2000.

A solid, credible international system of standards, documentation, certification, and labeling is the core of achieving the project's goal. The draft international standards and system that have been developed will be reviewed by MAC Network Working Groups in the Philippines and Indonesia to adapt these to the regional situation, while maintaining their integrity as international "umbrella" standards.

Specific activities supported by USAID include:

- Industry members (including collectors) from the MAC networks in each country that are willing to contribute time and effort to certification development will undertake testing of the certification system through trial runs of the standards along "strands" of the chain of custody from collection (or culture)-to-export. This will test the system and the industry's capacity to operate according to the standards, as well as the linking aspects of the system, e.g. product tracking and documentation.
- Identifying and convening participants of the Working Groups to review and adapt the standards.
- Identifying industry members (including collectors) willing to participate in testing and provide them with information on standards and certification.
- Assisting with evaluating and understanding how to adapt practices to achieve compliance with standards.
- The results of the testing will be revised by the Working Groups and revisions recommended for the synthesized international standards and certification system.

**Level of Effort for the Activities to Test and Train for Certification: \$12,000 (USAID)**

**Result/Output: Standards and certification system adapted by country Working Groups. Standards and certification system tested in test strands of collection (or culture)-to-export.**



**Results of testing documented and provided to international standards Working Group. \$ 12,000 (USAID)**

**Activity 4.5: Informing and Training Industry Participants in the Philippines and Indonesia**

The MAC Philippines/Indonesia Coordinator, MAC partners and network members, the MAC Director, and a consultant will undertake this activity in the Philippines and Indonesia in the second through the fourth quarter of FY 2000

Specific activities supported by USAID include:

- Distribution of documents that clearly explain the standards, documentation system, etc. This includes manuals that guide industry participants through self-evaluation procedures and explain how to upgrade systems and practices to achieve "certifiable" standards and training materials for collectors and industry personnel.
- A MAC international working group will develop initial information and training materials. These will be reviewed by the MAC Network Working Groups in the Philippines and Indonesia and revised to reflect conditions and needs in the region.
- Wherever possible, training (for collectors and others) will be conducted by MAC network members with existing expertise in training.
- Working Groups will be convened to review the manuals and training materials.
- Consultant will adapt the manuals and training materials.
- Materials will be disseminated .
- As possible, participants will undertake self-evaluation using manuals with assistance as needed.
- Industry participants (including collectors) needing training will be identified.
- Targeted training workshops will be conducted.

**Level of Effort for the Activities Informing and Training Industry Participants: \$17,300 (USAID)**

**Result/Output: Manuals and training materials adapted to region by country Working Groups and consultant. Manuals and training materials disseminated. Evaluation of ability to comply with standards by industry participants (including collectors). Training provided to industry participants to assist them to upgrade systems and practices to meet standards. \$ 17,300 (USAID)**

## **Lower Mekong Forests Implementation Plan**

**Total level of effort: USAID funding \$161,844**

As identified in the LWA technical proposal, one of the key threats to the health of this ecoregion is wildlife trade. While habitat destruction, unsustainable agricultural systems, unmanaged logging and population pressure are all threats to the region's biodiversity, the removal of species valued for their use in traditional medicine, as culinary delicacies, and as pets, is widely recognized as the greatest immediate threat. The following outlines specific measures for addressing this threat. The goal for this initiative is to provide appropriate technical assistance for Combating Illegal Wildlife Trade in Lao PDR and Neighboring Countries.

The COP does not play a large role in the project. At one point the idea of sending a Lao delegation as observers was discussed but this is no longer possible with the existing schedule.

### **1. Objective 1: Provide support and guidance to the government of Lao PDR in regard to its ascension to CITES.**

**Result 1.1: Improved understanding and support for CITES and Wildlife Trade Law enforcement within all levels of Lao Government.**

**Level of Effort for Activity 1.1.1: \$32,000 (USAID)**

**Level of Effort for Activity 1.1.2: \$4,200 (USAID)**

**Level of Effort for Activity 1.1.3 & 1.1.4: \$16,000 (USAID)**

**Total Level of Effort for Result 1.1: \$52,200 (USAID)**

Key decision-makers within the Lao Government are still unfamiliar with CITES and its implementation. In order for the Lao Government to accede to CITES, they will need a clear understanding of the process of how to accede and then how to implement CITES after ascension. The project will provide CITES documentation in Lao language to key decision-makers as well as supporting staff, and will hold a workshop to discuss CITES and its implementation.

**Activity 1.1.1:** Production of awareness materials providing an overview of CITES and its implementation.

Lao Department of Forestry staff will be supported by WWF staff to produce a manual for use in Wildlife Trade Law enforcement and a manual on CITES and its implementation.

**Output 1.1.1:** Two books produced and distributed to Government officials at Central and Field level in the Ministries of Agriculture and Forestry, Justice, Commerce, and Interior.

**List of Key Staff:**

- Two officials from the Division of Forest Resource Conservation (DFRC)
- One staff from WWF Lao Project Office
- External Translating services
- Conservation Coordinator will supervise
- Conducted in cooperation with TRAFFIC Indochina and WCS Lao PDR

**List of Resource Requirements:**

- Computer access
- Staff time as above

**Activity 1.1.2:** Translation of relevant CITES Documentation into the Lao language for use by decision-makers. These include relevant officials in the Department of Forestry, Ministry of Agriculture and Forestry, Ministry of Foreign Affairs (specifically the International Conventions and treaties units) as well as relevant provincial and district officials at border crossings.

In addition to awareness materials, the project will provide Lao translations of CITES and its appendices. This information will serve to inform the Lao Government (relevant Ministries and line agencies) of the requirements of CITES before their accession as well as provide a valuable resource after they have acceded.

**Output 1.1.2:** CITES documentation available and distributed widely in the Lao language. Clear guidance produced for the Lao Government to follow in order to accede to CITES.

**List of Key Staff :**

- One staff from the DFRC
- One External Translator
- Overseen by Conservation Coordinator

**List of Resource Requirements:**

- Computer Access
- Staff time as above

**Activity 1.1.3:** Conduct a national level workshop in cooperation with the Wildlife Conservation Society, IUCN, and Traffic Indochina.

A National level workshop to discuss CITES and its implementation will be conducted in Vientiane to discuss how the Lao government should proceed before and after acceding. This workshop will involve all relevant stakeholders at the central government level, including the Department of Forestry, the Customs office, the Ministry of Defense and Interior as well as the International Treaties unit of the Ministry of Foreign Affairs. This will begin the process of the Lao Government's accession to CITES and provide a roadmap on how to proceed.

There are no local champions identified.

**Output 1.1.3:** National workshop held. Key decision-makers agree on a schedule for CITES ascension and implementation.

**List of Key Staff:**

- Two staff from the DFRC
- Two staff from WWF
- External meeting Facilitator
- Conservation Coordinator will supervise
- Participation of representatives of Ministry of Agriculture and Forestry, Ministry of Defense, Ministry of Commerce, and Ministry of Interior

**List of Resource Requirements:**

- Meeting Room
- Staff time as above Per Diem

**Activity 1.1.4:** Directed discussions with key decision-makers within the relevant line ministries.

In addition to dialogue in a workshop setting, WWF project staff will direct inquiries to key decision makers in order to facilitate CITES ascension. This will consist of repeated meetings with sympathetic and influential leaders to further the accession process. Within the existing political climate CITES accession is being supported at a number of different levels. At the regional level, it is being discussed as a tool in environmental mitigation for large-scale transportation projects especially those funded by the ADB. There are a few other local supporters including local crocodile farms, etc.

**Output 1.1.4:** High level political support for Lao's ascension to CITES.

**List of Key Staff:**

- One staff from the DFRC
- Conservation Coordinator, WWF

**List of Resource Requirements:**

- Staff time as above

## **2. Objective 2: Increase awareness and understanding of the effects of illegal Wildlife Trade at all levels of government.**

### **Result 2.1: Improved communication between relevant Ministries and Government Agencies**

**Level of Effort for Results 2.1 and 2.2:** \$7,500 (USAID)

The issue of Wildlife Trade and its importance in biodiversity conservation is still not widely understood within the Lao Government. Although some agencies are actively combating trade and enforcing the few laws that exist, other agencies are supporting and benefiting from it. These issues need to be addressed immediately and the project will open formal and informal dialogue between conflicting agencies. The Ministry of Agriculture and Forestry will be used as key

counterpart agency and formal meetings will be arranged through them. Existing mechanisms of inter-ministerial dialogue will be used to increase awareness of Wildlife Trade issues.

**Activity 2.1.1:** Facilitate Dialogue between the Ministry of Agriculture and Forestry of the Lao Government with the Ministry of Commerce, Ministry of Interior, and Ministry of Defense to specifically address the issue of Wildlife Trade.

A series of small meetings will be held between Ministries to identify areas of conflict and potential solutions.

**Output 2.1.1:** A minimum of four inter-ministerial meetings held to discuss conflicting policies and strategies for improved cooperation, specifically at international border crossings.

Formal Inter-ministerial dialogue continues to address Wildlife Trade issues.

**List of Key Staff:**

- Two staff of the DFRC
- Conservation Coordinator, WWF

Result 2.2: Developed appropriate regulations for Wildlife and Wildlife Trade in cooperation with the Lao Government

The Lao Government's existing regulations concerning wildlife protection and trade are inadequate. WWF, in cooperation with WCS and IUCN, has been providing support and guidance for reforming these regulations. WWF, WCS and IUCN are working together on several important issues in Lao PDR. WCS has taken the lead in Biological Surveys and baseline conservation training, IUCN is currently heavily involved in the planning and implementation of the Protected Area system, and WWF is moving forward on Wildlife Trade and Sustainable Forestry issues. This project will support the continuation of this guidance.

**Activity 2.2.1:** Continued participation of WWF in the Lao National Working Group for Wildlife Regulations, in order to develop appropriate regulations for Wildlife and Wildlife Trade in cooperation with the Lao Government.

The Lao Government has yet to develop comprehensive regulations on Wildlife and Wildlife Trade. The project will participate in on-going discussions and development of these regulations in cooperation with the Lao Government.

**Output 2.2.1:** Regulations on Wildlife and Wildlife Trade drafted and ratified.

**List of Key Staff:**

- Two staff from the DFRC
- One staff from WWF
- Conservation Coordinator, WWF

**List of Resource Requirements:**

- Staff time as above

**3. Objective 3: To strengthen law-enforcement capacity at border crossings and other field sites.****Result 3.1: Improved training capacity at the national level for Wildlife Trade enforcement**

**Level of Effort for Activity 3.1.1:** \$64,000 (USAID)

**Level of Effort for Activity 3.1.2:** \$6,300 (USAID)

**Total Level of Effort for Result 3.1:** \$70,300 (USAID)

The greatest threat to biodiversity in Lao is wildlife trade. In the large forested areas of central Lao PDR, WCS, IUCN, and WWF have concluded that there are more foreign wildlife poachers in the area at any given time than there are Lao citizens. The low population density and limited transportation infrastructure in the country seriously reduces the immediate threat of large-scale habitat disturbance. The key issue is clearly selective harvesting of targeted species for foreign markets, i.e. wildlife. Huge quantities of animals are exported across legal and illegal border crossings everyday. Although some of this trade is done with the consent of border guards a great deal is not stopped because of lack of knowledge of Lao's existing rules and regulations regarding wildlife. This project aims to educate border guards at priority border crossings about Lao law and the importance of stopping wildlife trade.

**Activity 3.1.1:** Train a team of national level trainers to build capacity for Wildlife Trade enforcement at the field level, specifically at border crossings.

The Lao Government's training capacity is very low. In order to offset this low capacity, a "training of trainers" approach needs to be taken. This approach will develop a multi-ministerial training team at the central level. This team can then be used to conduct training at the priority sites identified by the project and could eventually be used elsewhere as needed. The teams will be linked to the Ministries of Agriculture and Forestry, Commerce, Interior, and Defense. Their experience in conducting training at priority sites will be able to continue in the form of training at other border crossings, at the central level, and in their eventual decision making as they advance through government channels.

**Output 3.1.1:** Training team assembled and conducting trainings. National level training capacity improved.

**List of Key Staff:**

- One Independent trainer
- One WWF staff
- Two staff from the DFRC, Ministry of Agriculture and Forestry
- One staff from Ministry of Interior
- One staff from Ministry of Commerce
- One staff from Ministry of Defense

**List of Resource Requirements:**

- WWF Vehicle
- Staff time as above Per Diem
- Training Materials

**Activity 3.1.2:** Develop a training curriculum with government partners to address wildlife identification, existing laws and regulations concerning wildlife, and basic law-enforcement techniques.

Rather than conducting a singular training event, the project will develop a curriculum that can be used by government agencies long after the project is completed. This curriculum will cover the large number of issues that need to be addressed to understand wildlife trade. The continued use of this curriculum could be supported by other organizations such as IUCN or WCS. It could be adapted for cross border application in Vietnam, China, Cambodia, and Thailand, as well as providing a baseline for future interventions to build upon.

**Output 3.1.2:** A curriculum produced and distributed in Lao and English language and used after Lao government or other agencies complete the project.

**List of Key Staff:**

- One Independent Trainer
- One WWF staff
- Training team as above (Activity 3.1.1)

**List of Resource Requirements:**

- Computer access
- Staff time as above

**Result 3.2: Improved law-enforcement capacity at eight border crossings between Lao, Vietnam, and Thailand.**

**Level of Effort for Activity 3.2.1:** \$21, 300 (USAID)

**Level of Effort for Activity 3.2.2:** \$10, 544 (USAID)

**Total Level of Effort for Result 3.2:** \$31,844 (USAID)

**Activity 3.2.1:** Conduct training at eight priority border crossings using the national multidisciplinary training team.

Once a team of trainers has been assembled and a curriculum developed, the team will conduct training on wildlife trade law enforcement. Training will be concentrated at priority border crossings throughout Lao.

The training team will train Border Guards on wildlife and wildlife product identification, the laws governing wildlife trade in Lao PDR, an overview of CITES and its implementation, as well as basic law enforcement techniques.

**Output 3.2.1:** Eight trainings conducted at priority border sites between Lao, Vietnam and Thailand. Law-enforcement capacities at these border crossings improved.

**List of Key Staff:**

- One Independent Trainer
- Training team as above (Activity 3.1.1)

**List of Resource Requirements:**

- WWF Vehicle
- Staff time as above
- Per Diem
- Training Materials

**Activity 3.2.2:** Provide direct assistance to priority border crossings.

Wildlife trade is a poorly understood issue within the Lao Government. Border crossings do not have the equipment or facilities to allow for efficient and effective work. The activity will identify needs within each border post and provide direct assistance or identify where assistance can be found.

**Output 3.2.2:** Eight border crossings immediate equipment needs filled or an alternate source of support identified.

**List of Key Staff for Activity 3.4:**

- One WWF staff
- One Independent Trainer
- Training team as above (Activity 3.1.1)

**List of Resource Requirements for Activity 3.4:**

- WWF Vehicle
- Staff time as above Per Diem
- Basic Field Equipment (notebooks, flashlights, rain gear, camping equipment, etc.)



## **Bering Sea Ecoregion Implementation Plan**

Following a biological assessment and biodiversity vision workshop held in March, 1999, several key actions were defined that will be essential to achieving the overall objective of the Bering Sea Ecoregion activities. Those funded USAID through the LWA have implementation plans for FY99 outlined below.

**Total level of effort: \$160,000 (\$80,000 USAID, \$80,000 WWF)**

**Result 1:** Formal establishment of marine zone; initiation of environmental enforcement and educational activities.

Level of effort: \$40,000

### **Activity: Establishment of Marine Zone for Nalychevo Nature Park**

We will pursue the establishment of marine zone for **Nalychevo Nature Park**, Kamchatka. The creation of a marine zone is an opportunity to accomplish several things, the first being improved protection of a coastal and marine area that is valuable for birds and mammals. Secondly, because the marine zone will be an extension of an existing park, we will be able to take advantage of the existing administrative structure of the park. The park has a small staff with rangers and environmental educators. WWF has actively supported the park's educational program, which will be expanded to support the marine zone. Given the comparative proximity of the park to the city of Petropavlosk, the park offers an opportunity to initiate more hands-on public education about biodiversity.

The area proposed for protection was documented and described by local biologists already. The next step is to present an official proposal to the Kamchatka Committee on Ecology, to lobby a little the key decision-makers, and once we have gained approval, we will construct a ranger station on the coast; create a marine patrol and outfit the ranger(s) with communications equipment and uniform(s).

The project coordinator is Vitaly Menshikov, a local biologist who was centrally involved in establishing the terrestrial unit of the park. To create the marine zone requires the compilation of documentation and presenting it to the local conservation committee. Additionally, the work requires establishment of some coastal infrastructure that can host local people and house rangers who will patrol the area.

- List of key staff:

One local project manager (V. Menshikov)

Program Manager from Moscow will supervise (V. Nikiforov)

**Result 2:** Documentation of marine resources most valued by local indigenous peoples; basic documentation of location of resource use activities by local people; by non-local, commercial-scale users; potential concepts of marine protected area in Karaginsky Bay.

Level of Effort: \$10,000

Like the region of Nalychevo Nature Park, WWF has had some experience working in northern Kamchatka, where we are conducting a survey in **Karaginsky Bay**. Karaginsky region is a critical area for marine biodiversity, and was identified in the Biodiversity Assessment as a high conservation priority. It is also home to native Koryak people. We believe that this area is a candidate for a marine protected area. But since our work to date has been focused inland, we have planned this survey to have more information and to lay groundwork for what we hope we become a local initiative to establish a marine conservation area.

**Activity:** Conduct sociological survey around Karaginsky Bay (Koryakia region, northern Kamchatka Peninsula), compile results, analyze local attitudes toward concept of protected area establishment in waters around Karaginsky Island. Map resource use around the island.

Documentation of marine resources most valued by local people in northern Kamchatka (Koryakia) has already begun. Our contractor, Dr. Vladimir Kiprianov, has made site visits to the Karaginsky Bay region and interviewed residents about their use of the marine resources. He is using Geographic Information Systems to record his findings. While local people are not involved in the mapping project, it is they who are providing the information for the map. The regional administration in Ossora village, in the Karaginsky Region, has worked with WWF previously and has expressed support for our work. Following Kiprianov's visit, a local sociologist visited the region and conducted a poll among local people, inquiring about local attitudes and perceptions toward nature, conservation, and the idea of creating protected areas. Additionally, WWF-Russia (based in Moscow) conducted a large-scale survey on attitudes toward the environment in the entire Kamchatka area. The information from this larger-scale report has been published in Russian and will further assist us in evaluating local attitudes toward WWF's conservation initiatives.

- List of key staff:
  - Project consultant (Vladimir Kiprianov), coordinating small team of sociologists
  - Program Manager from Russian Program Office (will supervise) (V. Nikiforov)

**Result 3:** Population estimate of sea otters, a potential indicator species, in one of WWF's priority areas within the Bering Sea ecoregion.  
Level of Effort: \$20,000

Through the comparison with Aleutian Island populations we will have a "big picture" of the state of the sea otters. The project will provide updated information on a population of marine mammals that is declining precipitously in several sites in the Bering Sea. The last Aleutian-wide surveys were conducted in 1992, and 1965. To date no joint aerial surveys have been conducted. A joint survey conducted in both areas using one methodology will allow for comparisons across the southern boundary of the ecoregion. Additional results of overflights in the Commanders include the subtle message to vessels fishing illegally in the Zapovednik's marine zone that monitoring and enforcement activities are being strengthened in the region.

**Activity 3:** Joint Russian-US survey of sea otter populations in Kommandorsky Zapovednik. This will include an aerial survey of the sea otters of the Aleutian and Commander Islands, a shared island ecosystem divided by the international boundary line.

- List of key staff:

Two Russian biologists to participate in survey

Team of US biologists (USFWS, also University of California at Santa Cruz)

**Result 4:** Increased awareness of target audiences on the biological and economic importance of the Bering Sea.

Level of Effort: \$10,000

**Activity:** Support multiple-strategy activities for a comprehensive ERBC approach as follows:

In the first stage, an important task is raising general public awareness about the importance of the ecoregion as an economic resource. One key target audience is the representatives of regional governments (Alaska, Kamchatka, Chukotka). We must make the case for improved stewardship as a key to economic profit in the regions. This is done through facilitating media coverage and direct contact with government officials as appropriate to the area.

Another target audience is local people, which in some cases are mostly indigenous communities. If our long-term goals are to establish marine protected areas, we must instill the interest in and capacity for achieving this among the communities. As part of our plan to influence local attitudes in favor of marine conservation, we are initiating a number of educational programs, to use both formal and informal educational institutions. For local target audiences, activities will include children's science and stewardship camps and publication of educational materials. Additionally we are supporting an educational public radio program on science and stewardship in the Bering Sea. The program - "Alaska Coastal Currents" – is being produced by Alaska Public Radio and is being translated into Russian.

In view of the need to provide useful and accurate marine biodiversity information, and to provide the educators themselves with useful skills, we will support some informal and formal training opportunities for Russian educators. Some of this training can take place within Russia, with instruction provided by Russian counterparts skilled in this field. Some of this training will be by providing Russian educators with an opportunity to view first-hand successful programs that involve school kids and adults alike in conservation. On Alaska's Bering Sea coast, a number of successful programs involving youth in conservation offer potential models for Russian colleagues. Similarly, some Russian educators in Chukotka and Kamchatka have demonstrated creative and innovative approaches in conservation education that would be beneficial for American counterparts. Last year (1999) WWF supported a visit of a Russian educator to the Pribilof Islands Stewardship Program. We'd like to facilitate more of this kind of exchange across the seas.

Our efforts in this field will have to target a number of behaviors, including:

Irresponsible fishing practices conducted by commercial fishing interests in the western Bering Sea; (2) a laissez-faire attitude (manifested in the lack of enforcement and involvement by

Kamchatrybvod and other governmental agencies); and (3) a lack of support for strict enforcement of fisheries law among political representatives and decision-makers

To begin addressing these problems we have commissioned a study on the commercial fishery in the western Bering Sea. The draft study already has revealed an exceedingly high level of illegal exports of fisheries products from Russia. We are waiting for additional, more refined information to improve the report, which will help us make our case to managing agencies that change and enforcement is needed. The report will help to quantify the level of overfishing, in terms of biomass and in terms of income being lost by Russia as a result of the illegal exports. We hope to use this information and the report as an advocacy and educational tool when working with the regional governmental agencies who stand to benefit from improved management. Additionally, to influence the behavior of the fishing industry, we are planning some cooperative projects with Kamchatrybvod, the fisheries management agency in the western Bering Sea which will improve the agency's monitoring system on the high seas and will increase its profile as an effective enforcement agency. These projects will build upon our last year's experience in funding rewards to fisheries inspectors or effective law enforcement.

In terms of our more broadly oriented public awareness activities, we are targeting other behaviors, such as (1) educators' styles of teaching about the environment, (2) young people's attitudes toward the environment, and (3) journalists' portrayals of conservation issues in the Bering Sea. We have already begun to do this by introducing Russian educators to new ways of teaching about the environment. Last year we supported a visit to Alaska for one Russian environmentalist who leads a NGO and sponsors educational (conservation, science, outdoors ed.) activities for kids in the Anadyr region. The Russian leader, Varya Litovka, spent ten days with the Pribilof Stewardship Program, which pairs youth with scientists and involves young people in conservation on the Pribilof Islands.

Because WWF has several years' experience of developing educational initiatives in Russia, there is now a pool of environmental educators who will be helpful in training their own compatriots and counterparts. We are planning to support a teachers' seminar in Chukotka, probably in the second year of the LWA grant (2001). Among the "trainers" will be Russian educators from Kamchatka who have already worked with WWF and have demonstrated their skills. The training will aim to introduce a variety of skills that are still fairly new to most Russian educators. For example, new skills might be: instead of rote memorization, the use of more interactive learning techniques; introducing broad ecological themes into the more classically taught biology and other sciences; the use of simple games and contests that encourage kids to learn basic tenets of environmental studies (such as the "web of life," the concept of biodiversity, the role of humans in the environment).

Other activities aimed at raising general public awareness about the environment include the creation of "Living Planet Clubs" in Chukotka. The clubs are organizations that will provide a focal point for teachers and children to learn, have fun, and take part in protecting the marine and coastal environment. We are working with native organizations, NGOs, local cultural centers, and the school boards to establish these educational clubs. We have done this already in Kamchatka, where the program is gaining popularity.

Regarding the media, we have plenty of work to do in the US and Russia alike to introduce the journalist community to the important issues surrounding the Bering Sea. We began last year in the US by bringing a group of writers from nationally syndicated newspapers and a radio journalist to the Bering Sea. More than ten articles were generated, reaching more than eight million people in the US. We plan to continue our outreach efforts among the media representatives in Moscow, the Russian Far East, and the US as well.

As we promote the Bering Sea to journalists, we have already convinced some media channels that fisheries, climate change, and conservation in the ecoregion are worth reporting on. We are now supporting the journal and web site “Northern Pacific” which targets the fishing community in Russia as well as the international environmental community. On the eastern side of the Bering Sea we are supporting the Alaska Public Radio Network to produce a series of stories on science and stewardship in the Bering Sea. We have translated several of the stories into Russian, for broadcast in the Bering Sea ecoregion. We are also initiating a counterpart series in Chukotka, called “Chukotka Coastal Currents.” This show will broadcast stories on science and conservation in both the Russian and Chukchi languages.

**Result 5:** Increased international attention to loss of economic resources and biological wealth in the western Bering Sea due to illegal fishing. Increased pressure on governmental bodies to work together to resolve problem of overfishing and mismanagement of fisheries in the Bering Sea.

One of the gravest threats to the Bering Sea’s astounding biodiversity is the intensive exploitation of commercial fisheries. There is additional concern that the collapse of law the economy and the weakening of law enforcement agencies in Russia, fishing pressure in the western Bering Sea has increased dramatically in the last decade. While this concern is widespread, it is exceedingly difficult to quantify the volume by which fisheries are being overfished. However, we do know that in the western Bering Sea, fisheries management is highly pressured by illegal fishing. Some experts estimate that Russia loses 2.5-4.5 billion dollars each year due to illegal fishing. In 1999 WWF commissioned an investigative report to be conducted in the western Bering Sea to identify the extent of illegal fishing. Investigators researched key species being traded, and the markets where they are being sold. Economic values and losses were calculated.

**Activity:** A draft report has been issued which will become the cornerstone of our fisheries conservation initiative, as well as a communications and advocacy tool. The recommendations contained in the report will help us to shape our further actions in the region. Most likely, these activities will involve some short-term solutions. For example, this may include developing anti-poaching brigades for key marine species as WWF has done in tiger conservation. Such programs would include technical assistance as we have provided in the Russian Far East to improve forest fire management. We will also develop longer-term steps advocating for the creation of and training for more stringent observers’ programs in Russia, as well as policy initiatives in US and Russia that will support ecosystem-wide management approaches.

The observers' program mentioned in the implementation plan to USAID is a program whereby fishing vessels carry on board an inspector whose duty it is to record any by-catch (non-targeted species of fish, birds, or marine mammals) or to report on violations in fisheries regulations, such as inappropriate gear, excessive harvest of a particular species, taking fish in a closed area, mis-recording a catch, illegally transferring a catch at sea, or any other number of violations. Part of the problem with the observers' program is the pitifully low wages fisheries inspectors are paid (on average, about \$50 per month), which makes these people a) tempted to sign up for observers' duty, which pays upwards from 50 to 100 dollars and b) once they are board, they are vulnerable to bribes. The observers' program is a highly corrupted system in which special interests (the commercial fishery) are themselves responsible for paying the observers (a situation in which the "fox is guarding the henhouse.")

Changing the situation will not be easy, but we must begin to work with the agencies responsible for management. One immediate solution is to follow the example we have developed in the Russian Far East, in tiger protection. By funding a team of well-paid, well-equipped anti-poaching brigades, we have helped to create a situation in which the work of a ranger is more prestigious than that of a poacher; the rangers work more efficiently because they have vehicles, radios, warm uniforms, and government support to prosecute the violators. Because they have their basic needs met and can support themselves with a solid livelihood, the rangers are not tempted to risk arrest and fines by poaching tigers. In the western Bering Sea, we can build on this experience and work to establish a team of well-paid, well-trained fisheries inspectors and observers who receive support and recognition for honest work in enforcement. We are currently discussing the creation of such a program with Kamchatrybvod in Petropavlosk.